



April 12, 2010

Senate Place, LLC
912 Lady Street – Suite 300
Columbia, South Carolina 29201

Attention: Mr. J. Wes Taylor

Reference: Asbestos and Lead-Based Paint Survey Report
SC Dept. of Agriculture Laboratory
1101 Williams Street
Columbia, South Carolina
S&ME Project No. 1614-10-079

Dear Mr. Taylor:

S&ME, Inc. (S&ME) is pleased to provide the enclosed report detailing our asbestos and lead-based paint survey of the South Carolina Department of Agriculture Laboratory building located at 1101 Williams Street in Columbia, South Carolina. The work was performed in general accordance with S&ME Proposal No. 1614-7349-10, dated February 15, 2010 and Agreement for Services, form AS-071. The enclosed report includes the executive summary, project background, investigative procedures, findings and results, and conclusions and recommendations for the proper treatment of the identified hazardous materials.

This report is provided for the use of Senate Place, LLC. Use of this report by any other parties will be at such party's sole risk and S&ME, Inc. disclaims liability for any such use or reliance by third parties. The results presented in this report are indicative of conditions only during the time of the assessment and of the specific areas referenced. The information provided in this assessment report should not be used as a bidding document, and field conditions should be verified by contractors bidding on asbestos removal.

We appreciate the opportunity to provide you with our industrial hygiene/environmental services. If you have any questions concerning this report, please call us at (803) 561-9024.

Sincerely,
S&ME, Inc.

A handwritten signature in black ink, appearing to read "Owen Astwood".

Owen Astwood, P.G.
Asbestos Building Inspector
(SCDHEC Lic. #BI-00475)

A handwritten signature in black ink, appearing to read "Tom Behnke".

Tom Behnke, P.G., CHMM
Environmental Services Manager
(SCDHEC Lic. #MP-00004)

ASBESTOS AND LEAD-BASED
PAINT SURVEY REPORT

**SC DEPT. OF AGRICULTURE LABORATORY
1101 WILLIAMS STREET
COLUMBIA, SOUTH CAROLINA**

S&ME Project No. 1614-10-079

Prepared for:

Senate Place, LLC
912 Lady Street, Suite 300
Columbia, South Carolina 29201
(803) 254-9082

Survey Performed By:

Owen Astwood, P.G.
SCDHEC Lic. # BI-00475
March 9 & 11, 2010



134 Suber Road
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Report Date:

April 12, 2010

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EXECUTIVE SUMMARY

An asbestos and lead-based paint survey was conducted on March 9 & 11, 2010 of the South Carolina Department of Agriculture (SCDA) Laboratory facility located at 1101 Williams Street in Columbia, South Carolina. The purpose of the asbestos survey was to identify and quantify the presence asbestos-containing materials (ACMs) and surfaces coated with lead-based paint prior to renovations to the structure.

The subject building is a two story masonry block and metal frame structure on a concrete slab foundation. The building contains approximately 30,000 square feet of interior space. The building was reportedly constructed in 1972. The building is occupied by the SCDA Laboratory division and includes numerous laboratories, storage rooms and offices.

Asbestos

Bulk samples were collected from suspect ACMs that were observed and the samples were subsequently analyzed for asbestos content by an accredited laboratory. These suspect materials included various flooring materials, sealants on HVAC duct insulation, wall and ceiling finishes and lab bench material. The Environmental Protection Agency (EPA) and the South Carolina Department of Health and Environmental Control (SCDHEC) define materials as asbestos-containing if an asbestos content of greater than one percent (>1%) is detected in a representative sample. Asbestos, in concentrations >1%, was identified as a result of the assessment. The following table summarizes the ACMs identified in structure:

Material	Material Location	Asbestos Type & Percent	Condition	*Approx. Quantity
Grey sealant	HVAC ducts, northeast mechanical room	Chrysotile - 25-35%	Good, Non Friable	250 ln ft, observed
12" Off white vinyl floor tiles with green accents & black mastic	2 nd floor - hallways, electrical closets and stairwells	Chrysotile - 3% & 5-6%	Good, Non Friable	1,650 ft ²
12" Off white vinyl floor tiles & black mastic	1 st floor – hallways, most labs	Chrysotile - 2% & 6%	Good, Non Friable	5,200 ft ²
Black mastic assoc. with 12" grey floor tiles	Petroleum lab	Chrysotile - <1-4%	Good, Non Friable	150 ft ²
Purple soundproofing	Metal sink, 2 nd floor break room	Chrysotile - 2%	Good, Friable	1 sink
Joint compound	1 st floor, front office walls	Chrysotile - 2%	Good, Friable	990 ft ²
Joint compound	2 nd floor, all walls	Chrysotile - 2%	Good, Friable	30,000 ft ²

Material	Material Location	Asbestos Type & Percent	Condition	*Approx. Quantity
Black sealant	Water pipes, 1 st floor	Chrysotile - 5%	Good, Non Friable	100 In ft observed
Black Lab benches	2 nd floor labs	Chrysotile - 15%	Good, Non Friable	3,400 ft ²
Cementitious window panels	1 st floor windows	Presumed ACM	Good, Non Friable	16 panels
Fire door insulation	Throughout the building (doors leading to hallways)	Presumed ACM	Good, Friable	56 doors

ft² = square feet

In ft = linear feet

*Note: The quantities are estimated and should be field verified for bidding purposes.

All of the identified asbestos-containing materials are considered to have a significant potential for disturbance based on the planned renovations to the building. No asbestos in concentrations >1% was detected in the remaining samples of suspect materials collected from the building.

Lead-Based Paint

Based on the age of the building, painted surfaces throughout the interior and exterior of the building were considered suspect and analyzed for lead content. Multiple painted surfaces associated with the building exhibited detectable levels of lead and the disturbance of these materials is regulated by the OSHA regulation 29 CFR 1926.62 (Lead in Construction). However, none of the coated surfaces that were tested exceeded the SCDHEC disposal criteria of 0.7 milligrams per square centimeter (mg/cm²).

1. BACKGROUND

S&ME was contracted by Senate Place, LLC to perform an asbestos and lead-based paint survey of the South Carolina Department of Agriculture (SCDA) Laboratory located at 1101 Williams Street in Columbia, South Carolina.

The subject building was constructed in 1972. It is a two story masonry block and metal frame structure on a concrete slab foundation. The building contains approximately 28,000 square feet of interior space. A small masonry block structure located near the northeast corner of the building was not included in the survey because the structure was locked and could not be opened.

Interior floor finishes include vinyl floor tiles, carpet, painted concrete and bare concrete. Walls are generally finished as painted cinder block or painted drywall. Ceilings are finished with suspended acoustic tiles or unfinished with exposed rafters. The restrooms are generally finished with ceramic tiles. Based on information provided by the user, the roofing system was not included in the survey as the planned renovations will not affect the roof. We recommend that bulk samples be collected and analyzed for asbestos content when building renovations are scheduled that will impact the roof.

1.1 Asbestos Survey Update

The asbestos survey update was performed to identify and sample suspect ACMs prior to renovation activities. The identification of ACMs will aid in the prevention of occupational exposures and/or environmental releases of airborne asbestos. Identification of ACMs also complies with Title 40 Code of the Federal Regulations, part 61, and State Regulation 61-86.1 enforced by the SCDHEC, along with Title 29 Code of Federal Regulations, part 1926 enforced by OSHA. The following sections describe the procedures used, results of the suspect ACMs sampled and analyzed, and conclusions and recommendations regarding the facility as related to ACMs.

1.2 Lead-Based Paint Survey

The lead-based paint survey was conducted to identify lead-based paint finishes which could be adversely affected by renovation activities. The identification of these materials will aid in the prevention of occupational exposure (OSHA) and/or environmental releases of airborne lead dust and provide information to facilitate proper disposal of lead-based paint coated components in accordance with the SCDHEC and the EPA.

2. ASBESTOS SURVEY

2.1 Investigative Procedures

The asbestos survey was performed by observing and collecting statistically random samples of suspect asbestos-containing materials associated with the interior and exterior of the structure. The possibility exists that suspect materials were not detected in inaccessible areas such as flooring overlays, pipe chases or wall voids. If additional suspect materials are discovered during future renovation or demolition activities, bulk samples should be collected and analyzed for asbestos content.

Many of the doors in the building are labeled as fire doors. The fire doors are considered suspect ACM. However, the doors were not sampled in order to preserve the integrity of the fire control systems. The windows on the exterior walls of the building appear new with rubber gaskets. No suspect window glazing compound was observed. Cementitious panels are present below the windows on the first floor and beside the front door. The panels appear to be asbestos-containing Transite. However, in order to preserve the integrity of the windows, the panels were not sampled and consequently are presumed to be ACM. Suspect sealants were observed on the thermal system insulation (TSI) on HVAC ductwork and water pipes above the suspended ceiling on the first floor. The black laboratory bench surfaces on the first floor were inspected and determined to be resin and not suspect ACM. The black lab benches on the second floor were inspected and determined to be suspect ACM. Suspect surfacing materials noted in the building consisted of drywall joint compound. The mechanical rooms on the north end of the building and the exterior piping associated with the HVAC system were inspected. No suspect TSI was observed.

Based on information provided by the client, the roof of the subject building is not going to be affected by the planned renovations to the building. Consequently, the roof system was not sampled. We recommend that bulk samples be collected and analyzed for asbestos content when building renovations are scheduled that will impact the roof.

A sampling strategy was developed to provide representative samples of suspect materials in accordance with OSHA, SCDHEC and EPA. Bulk samples were then extracted from suspect ACMs and recorded on a chain of custody record and submitted to our in-house Polarized Light Microscopy (PLM) laboratory. Non-friable organically bound materials requiring confirmation by Transmission Electron Microscopy (TEM) were submitted to *EMSL Analytical* for analysis. The laboratories are accredited by the National Voluntary Laboratory Accreditation Program (NVLAP), which is administered by the National Institute of Standards and Technology.

Polarized Light Microscopy (PLM)

The suspect materials were analyzed by trained microscopists using PLM techniques coupled with dispersion staining in accordance with EPA Test Method Title 40 Code of Federal Regulations, Chapter I (1-1-87 edition), Part 763, Subpart F-APPENDIX A. This method identifies asbestos mineral fibers based on six optical characteristics: morphology, birefringence, refractive index, extinction angle, sign of elongation and dispersion staining colors. The laboratory analysis reports the specific type of asbestos identified (there are six asbestos minerals) and the percentage of asbestos present.

Transmission Electron Microscopy (TEM)

Suspect non-friable organically bound materials (NOBs), exhibiting negative results by PLM analysis, were analyzed by trained microscopists by TEM using EPA 600 Method in accordance with ASTM E2356.

2.2 Findings and Results

The asbestos survey conducted on March 9 & 11, 2010 included the quantification and statically random bulk sampling of various suspect asbestos-containing materials located on the interior and exterior of the structure. These suspect materials include: acoustic ceiling tiles, various vinyl floor tiles and mastics, drywall, drywall joint compound, HVAC and pipe insulation sealants, stair treads and mastic, HVAC vibration dampeners, vinyl baseboards and mastics, lab benches and soundproofing on the bottom of a metal sink. Suspect materials that were not sampled consist of fire door insulation and cementitious panels under the exterior windows on the first floor. Of the representative materials sampled and analyzed, asbestos in concentrations >1% was identified in the following materials summarized below.

Material	Material Location	Asbestos Type & Percent	Condition	*Approx. Quantity
Grey sealant	HVAC ducts, northeast mechanical room	Chrysotile - 25-35%	Good, Non Friable	250 In ft, observed
12" Off white vinyl floor tiles with green accents & black mastic	2 nd floor - hallways, electrical closets and stairwells	Chrysotile - 3% & 5-6%	Good, Non Friable	1,650 ft ²
12" Off white vinyl floor tiles & black mastic	1 st floor – hallways, most labs	Chrysotile - 2% & 6%	Good, Non Friable	5,200 ft ²
Black mastic assoc. with 12" grey floor tiles	Petroleum lab	Chrysotile - <1-4%	Good, Non Friable	150 ft ²
Purple soundproofing	Metal sink, 2 nd floor break room	Chrysotile - 2%	Good, Friable	1 sink
Joint compound	1 st floor, front office walls	Chrysotile - 2%	Good, Friable	990 ft ²
Joint compound	2 nd floor, all walls	Chrysotile - 2%	Good, Friable	30,000 ft ²

Material	Material Location	Asbestos Type & Percent	Condition	*Approx. Quantity
Black sealant	Water pipes, 1 st floor	Chrysotile - 5%	Good, Non Friable	100 In ft observed
Black Lab benches	2 nd floor labs	Chrysotile - 15%	Good, Non Friable	3,400 ft ²
Cementitious window panels	1 st floor windows	Presumed ACM	Good, Non Friable	16 panels
Fire door insulation	Throughout the building (doors leading to hallways)	Presumed ACM	Good, Friable	56 doors

ft² = square feet

In ft = linear feet

*Note: The quantities are estimated and should be field verified for bidding purposes.

The EPA classifies ACMs into two categories: friable and non-friable. A friable material creates a greater health hazard due to the fact that it may be "crumbled, pulverized or reduced to powder by the forces expected to act upon it in the course of demolition or renovation operations." The identified asbestos-containing floor tiles and floor tile mastics are classified as Category I non-friable materials in good condition. The identified grey duct sealant, black pipe insulation sealant, lab benches on the second floor and cementitious window panels (presumed) are classified as Category II non-friable materials in good condition. The fire door insulation (presumed), joint compound and soundproofing on the metal sink are classified as friable materials and are in good condition. All of the identified asbestos-containing materials are considered to have a significant potential for disturbance based on the planned renovations to the building. No asbestos in concentrations >1% was detected in the remaining samples of suspect materials collected from the building.

TEM analysis was performed on one sample of each of the non-friable, organically-bound materials that tested negative for asbestos by PLM analysis. These materials are:

- 12-inch grey vinyl floor tile from the Petroleum lab
- Black vinyl stair tread & mastic
- 4-inch black vinyl baseboard & mastic
- 4-inch hard black vinyl baseboard & mastic

The TEM analysis confirmed that no asbestos is present in the samples at concentrations $\geq 1\%$. However, materials that are bound to confirmed ACM (i.e. grey 12-inch floor tiles in the Petroleum Lab that are bound to the asbestos-containing mastic) should be considered to be ACM.

The following summary table exhibits the sample number, location, type of material tested, approximate quantity of the material sampled, condition of the material, and corresponding result for each sample. Diagrams exhibiting the bulk sample locations of

positive ACMs are provided in Appendix I. Photographs of building conditions and select ACM are included in Appendix II. The laboratory analyses and chain-of-custody records are provided in Appendix III and a copy of the inspector's SCDHEC license is provided in Appendix IV.

TABLE I: SUMMARY OF ASBESTOS BULK SAMPLE ANALYSIS

POLARIZED LIGHT MICROSCOPY								
Sample No.	Sample Location	Material	Approx. Quantity ¹	Asbestos Type	% ²	Condition	P.F.D. ³	H.A. ⁴
VD-1	NE Mechanical room	Cloth HVAC vibration dampener	8 In ft	ND	NA	NA	NA	NA
VD-2	Central Mechanical room	Cloth HVAC vibration dampener	12 In ft	ND	NA	NA	NA	NA
DM-1	NE Mechanical room	Grey duct insulation sealant	250 In ft (observed)	Chrysotile	25%	Good, NF	SPD	3
DM-2	NE Mechanical room	Grey duct insulation sealant		Chrysotile	35%	Good, NF	SPD	3
DM-3	2 nd floor, by elevator	White duct insulation sealant		ND	NA	NA	NA	NA
CT-1	1 st floor - Break room	2' x 2' Gypsum ceiling tile	3,550 ft ²	ND	NA	NA	NA	NA
CT-2	1 st floor – Janitor's office	2' x 2' Gypsum ceiling tile		ND	NA	NA	NA	NA
CT-3	1 st floor – Petroleum lab	2' x 2' Gypsum ceiling tile		ND	NA	NA	NA	NA
CT-4	2 nd floor – Room with roof hatch	2' x 2' Acoustic ceiling tile	22,000 ft ²	ND	NA	NA	NA	NA
CT-5	1 st floor – Conference room	2' x 2' Acoustic ceiling tile		ND	NA	NA	NA	NA
CT-6	1 st floor – Room 124	2' x 2' Acoustic ceiling tile		ND	NA	NA	NA	NA
FT-1	2nd floor – Electrical closet	12" floor tile - off white w/green Black mastic	1,650 ft²	Chrysotile	3%	Good, NF	SPD	3
FT-2	2nd floor – Janitor's closet	12" floor tile - off white w/green Black mastic		Chrysotile	3%	Good, NF	SPD	3
FT-3	2nd floor - Stairwell	12" floor tile - off white w/green Black mastic		Chrysotile	3%	Good, NF	SPD	3
FT-4	1st floor – Petroleum lab (patch)	12" floor tile - grey Black mastic	150 ft²	ND	NA	Good, NF	SPD	3
FT-5	1st floor – Petroleum lab (patch)	12" floor tile - grey Black mastic		Chrysotile	4%	Good, NF	SPD	3
FT-6	1st floor – Petroleum lab (patch)	12" floor tile - grey Black mastic		ND	NA	Good, NF	SPD	3
FT-6 (TEM)	1st floor – Petroleum lab (patch)	12" floor tile – grey (only)		Chrysotile	<1%	Good, NF	SPD	3
FT-7	1st floor – Janitor's closet	12" floor tile - off white w/specks Black mastic	5,200 ft²	ND	NA	Good, NF	SPD	3
FT-8	1st floor – Petroleum lab	12" floor tile - off white w/specks Black mastic		Chrysotile	2%	Good, NF	SPD	3
FT-9	1st floor – Petroleum lab	12" floor tile - off white w/specks Black mastic		Chrysotile	6%	Good, NF	SPD	3
ST-1	Western stairwell	Black vinyl stair tread Yellow mastic	144 ft ²	ND ND	NA NA	NA	NA	NA

TABLE I: SUMMARY OF ASBESTOS BULK SAMPLE ANALYSIS

POLARIZED LIGHT MICROSCOPY								
Sample No.	Sample Location	Material	Approx. Quantity ¹	Asbestos Type	% ²	Condition	P.F.D. ³	H.A. ⁴
ST-2	Eastern stairwell	Black vinyl stair tread Yellow mastic	144 ft ²	ND ND	NA NA	NA	NA	NA
ST-3	Eastern stairwell	Black vinyl stair tread Yellow mastic		ND ND	NA NA	NA	NA	NA
ST-3 (TEM)	Eastern stairwell	Black vinyl stair tread Yellow mastic		ND ND	NA NA	NA	NA	NA
SM-1	2nd floor break room – metal sink	Purple soundproofing on bottom	1 sink	Chrysotile	2%	Good, F	SPD	3
BB-1	2 nd floor – Electrical room	4" Black vinyl baseboard Brown mastic	5,800 ln ft	ND ND	NA NA	NA	NA	NA
BB-2	1 st floor – Janitor's closet	4" Black vinyl baseboard Brown mastic		ND ND	NA NA	NA	NA	NA
BB-3	1 st floor – Petroleum lab	4" Black vinyl baseboard Brown mastic		ND ND	NA NA	NA	NA	NA
BB-3 (TEM)	1 st floor – Petroleum lab	4" Black vinyl baseboard Brown mastic		ND ND	NA NA	NA	NA	NA
BB-4	2 nd floor – Western offices	4" Hard black vinyl baseboard Brown mastic	450 ln ft	ND ND	NA NA	NA	NA	NA
BB-4 (TEM)	2 nd floor – Western offices	4" Hard black vinyl baseboard Brown mastic		ND ND	NA NA	NA	NA	NA
BB-5	2 nd floor – Western offices	4" Hard black vinyl baseboard Brown mastic		ND ND	NA NA	NA	NA	NA
BB-6	2 nd floor – Western offices	4" Hard black vinyl baseboard Brown mastic		ND ND	NA NA	NA	NA	NA
DW-1	2 nd floor – Electrical closet	Drywall	30,000 ft ²	ND	NA	NA	NA	NA
DW-2	2 nd floor – Western offices	Drywall		ND	NA	NA	NA	NA
DW-3	2 nd floor – Room with roof hatch	Drywall		ND	NA	NA	NA	NA
DW-4	1 st floor – dropped ceiling in hallway	Drywall	3,200 ft ²	ND	NA	NA	NA	NA
DW-5	1 st floor – Break room	Drywall		ND	NA	NA	NA	NA
DW-6	1 st floor – Janitor's office	Drywall		ND	NA	NA	NA	NA
DW-7	1 st floor – front office, file room	Drywall		ND	NA	NA	NA	NA
JC-1	1st floor – front office, file room	Joint compound	3,200 ft²	Chrysotile	2%	Good, F	SPD	3
JC-2	1 st floor – Break room	Joint compound		ND	NA	NA	NA	NA
JC-3	1 st floor – Janitor's office	Joint compound		ND	NA	NA	NA	NA

TABLE I: SUMMARY OF ASBESTOS BULK SAMPLE ANALYSIS

POLARIZED LIGHT MICROSCOPY								
Sample No.	Sample Location	Material	Approx. Quantity ¹	Asbestos Type	% ²	Condition	P.F.D. ³	H.A. ⁴
JC-4	1 st floor – dropped ceiling in hallway	Joint compound	3,200 ft ²	ND	NA	NA	NA	NA
JC-5	2 nd floor – Break room	Joint compound	30,000 ft ²	Chrysotile	2%	Good, F	SPD	3
JC-6	2 nd floor, by elevator	Joint compound		Chrysotile	2%	Good, F	SPD	3
JC-7	2 nd floor – outside Room 249	Joint compound		Chrysotile	2%	Good, F	SPD	3
JC-8	2 nd floor – Room 212	Joint compound		Chrysotile	2%	Good, F	SPD	3
JC-9	2 nd floor – outside Room 212	Joint compound		Chrysotile	2%	Good, F	SPD	3
JC-10	2 nd floor – outside Room 220	Joint compound		Chrysotile	2%	Good, F	SPD	3
JC-11	2 nd floor – Room 229	Joint compound		Chrysotile	2%	Good, F	SPD	3
WM-1	1 st floor – Conference room	Black sealant on water pipe TSI	100 In ft (observed)	Chrysotile	5%	Good, NF	SPD	3
WM-2	1 st floor – Room by elevator	Black sealant on water pipe TSI		Chrysotile	5%	Good, NF	SPD	3
WM-3	1 st floor – Room by elevator	Black sealant on water pipe TSI		Chrysotile	5%	Good, NF	SPD	3
LB-1	2 nd floor – Mixer room	Black laboratory table material	3,400 ft ²	Chrysotile	15%	Good, NF	SPD	3

ft² = square feet ND = No Asbestos Detected F = Friable SPD = Significant Potential for Disturbance
In ft = linear feet NA = Not Applicable NF = Non-friable

Note 1: The quantities are estimated, and should not be used for bidding purposes, as field conditions should be verified.

Note 2: The EPA, SCDHEC and OSHA define a material as asbestos-containing if an asbestos content greater than one percent (>1%) is detected in a representative sample.

Note 3: Potential for Disturbance

Note 4: Hazard Assessment

2.3 Abbreviations and Hazard Assessment Key

In accordance with the EPA and SCDHEC, a confirmed ACM is assigned a hazard assessment based on its present condition and potential for disturbance. The hazard assessment is used as a tool for prioritization in remedial actions regarding the identified ACM(s). The following key exhibits the criteria that compose the hazard assessment.

Present Condition

F = Friable

NF = Non-friable

G = Good (Very localized limited damage)

D = Damaged (Damage of less than 10% distributed and less than 25% localized)

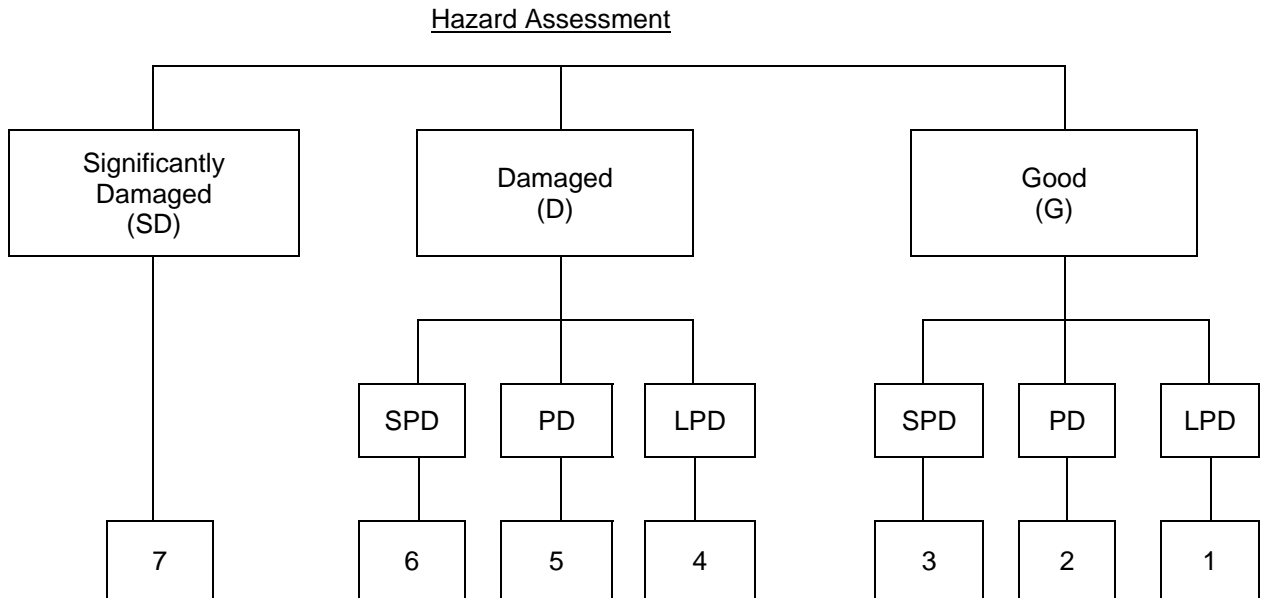
SD = Significantly Damaged (Damage equal to or greater than 10% distributed, 25% localized)

Potential for Future Disturbance

LPD = Low Potential for Disturbance (Contact, Vibration, and Air Erosion all of Low Concern)

PD = Potential for Disturbance (Contact, Vibration, or Air Erosion of Moderate Concern)

SPD = Significant Potential for Disturbance (Contact, Vibration, or Air Erosion of High Concern)



3. LEAD-BASED PAINT SURVEY

3.1 Investigative Procedures

This lead-based paint survey was conducted for compliance with the South Carolina Department of Health and Environmental Control (SCDHEC) limit of 0.7 milligrams (mg) of lead per square centimeter (cm^2) of painted surface for lead-based paint coated waste. SCDHEC, Health Division defines lead-based paint as a coating containing lead in quantities $\geq 0.7 \text{ mg/cm}^2$ (SCDHEC, Health Division definition #4-53-1320f). Any coated surfaces meeting or exceeding the SCDHEC limit of 0.7 mg/cm^2 were considered lead-based paint for the purpose of this survey.

OSHA does not recognize a threshold level of lead for definition purposes, only the presence or absence of lead. The current OSHA regulations recognize an airborne action level of thirty micrograms of lead per cubic meter of air ($30 \mu\text{g/m}^3$) during an eight-hour day and a permissible exposure level of fifty micrograms per cubic meter ($50 \mu\text{g/m}^3$).

Representative covered building components and surfaces were analyzed utilizing a Niton XL-309 X-Ray Fluorescence (XRF) spectrum analyzer (serial # U3826NR4314). The suspect painted finishes were selected based on the color of the topcoat and the underlying paint layers and/or the substrate on which it was applied. The possibility exists that lead-based paint finishes are present in inaccessible areas not tested such as pipe chases, wall voids, etc.

Attached in Appendix V is a summary of the paint readings analyzed by the XRF spectrum lead analyzer. The XRF summary provides the sample numbers, sample location, component, substrate, paint color, condition, and results.

3.2 Findings and Results

Coated surfaces throughout the interior and exterior of the building were tested for the presence of lead-based paint. The coated surfaces meeting or exceeding the SCDHEC limit of 0.7 milligrams of lead per square centimeter (0.7 mg/cm^2) were considered lead-based paint for the purpose of this survey.

No surfaces on the interior or exterior of the building exceeded the SCDHEC 0.7 mg/cm^2 limit for lead-based paint.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Asbestos Survey

The asbestos survey conducted on the SCDA Laboratory building located at 1101 Williams Street in Columbia, South Carolina identified the presence of asbestos-containing materials as follows:

- *Grey duct insulation sealant* (25-35% chrysotile) located on the seams in the fiberglass insulation on the HVAC ductwork. Refer to Photographs 2 and 7. The positive samples were collected from ducts in the northeast mechanical room. Approximately 250 linear feet observed. This estimate is subject to change following the removal of the suspended ceilings to expose the entire duct system.
- *Off-white 12-inch floor tiles with green accents* (3% chrysotile) *and black mastic* (5-6% chrysotile) located on the second floor in the hallways, electrical closets and stairwells – Refer to Photograph 3. Approximately 1,650 square feet.
- *Off-white 12-inch floor tiles* (2% chrysotile) *and black mastic* (6% chrysotile) located on the first floor in the hallways and most laboratories – Refer to Photographs 3 and 4. Approximately 5,200 square feet.
- *Black mastic* (<1-4% chrysotile) associated with non-asbestos containing 12-inch grey vinyl floor tiles located in the southwest corner of the Petroleum Lab on the first floor - Refer to Photograph 5. Approximately 150 square feet.
- *Purple soundproofing* (2% chrysotile) on the bottom of the metal sink in the break room on the second floor - Refer to Photograph 6. One sink was noted.
- *Joint compound* (2% chrysotile) associated with the drywall wall systems on the first floor. One of the four joint compound samples collected on the first floor was positive for asbestos. The positive sample was collected from the front offices on the northeast corner of the building – approximately 990 square feet of drywall. There is approximately 3,200 square feet of drywall wall systems on the first floor. Additional bulk sampling and analysis is recommended to determine the extent of the asbestos-containing joint compound on the first floor prior to renovations.
- *Joint compound* (2% chrysotile) associated with the drywall wall systems on the second floor. Approximately 30,000 square feet of drywall.
- *Bituminous pipe insulation sealant* (5% chrysotile) located on the seams of the fiberglass insulation on the water pipes above the suspended ceilings on the first floor. Refer to Photograph 7. The bituminous sealant was observed in the central portion of the building above the suspended ceilings and exposed in the room that contains the elevator equipment room. Approximately 100 linear feet of pipe were observed. This estimate is subject to change following the removal of the suspended ceilings to expose the entire piping system.

- *Black laboratory bench tops* (15% chrysotile) located on the second floor. Refer to Photograph 8. The black lab benches on the first floor appeared to be resin and are not considered to be suspect. It is estimated that approximately 3,400 square feet of laboratory counter tops are present on the second floor.
- *Cementitious window panels* (not sampled) located below the exterior windows on the first floor. Refer to Photographs 9 and 10. Similar materials commonly test positive for asbestos. The panels were not sampled in order to preserve the integrity of the window systems. There are approximately 16 cementitious window panels present in the building.
- *Fire door insulation* (not sampled) located throughout the building. Many of the doors in the building display metal tags that denote them as fire doors. The insulation inside the door is considered a suspect material; however, the doors were not sampled in order to preserve their integrity. Approximately 56 doors. Bulk samples should be collected and analyzed to confirm the presence or absence of asbestos prior to disturbance (i.e. cutting holes to install new door handles, etc).
- Bulk samples were not collected from roofing materials because the planned renovations are not expected to disturb the roof. It is recommended that bulk samples be collected and analyzed to confirm the presence or absence of asbestos prior to disturbance.

The EPA and SCDHEC require proper removal and disposal of ACMs that will be destructively affected by demolition and/or renovation activities, therefore we recommend the identified ACMs be properly removed and disposed by a qualified contractor licensed by SCDHEC, Asbestos Section, prior to the planned renovation and demolition activities. If additional suspect materials are discovered during the planned destructive activities, bulk samples must be collected and analyzed for asbestos content.

A copy of this assessment report must be submitted to SCDHEC, along with an application for demolition, 10 weekdays prior to demolition activities.

4.2 Lead-Based Paint Survey

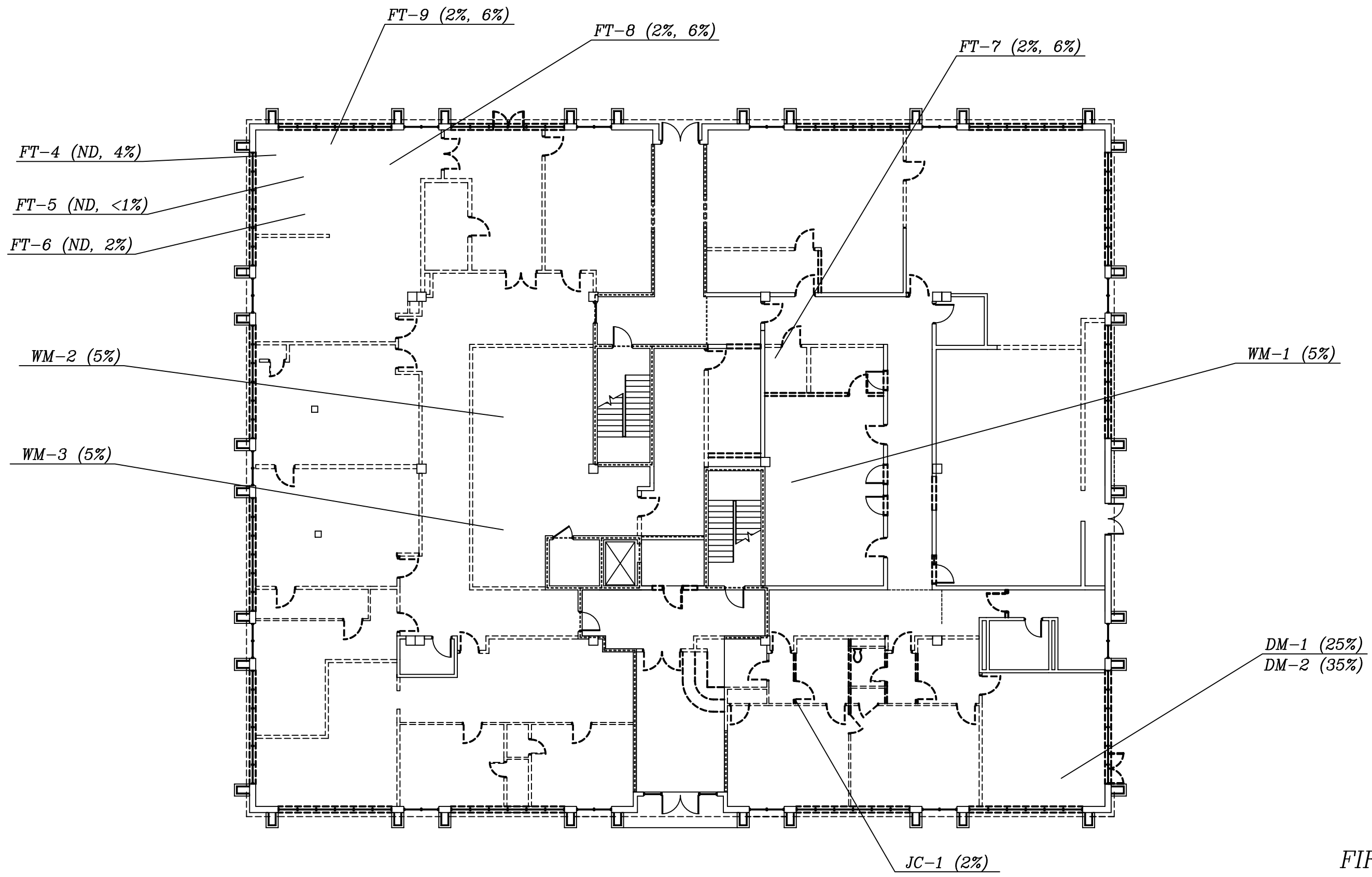
Coated surfaces throughout the interior and exterior of the building were tested for the presence of lead-based paint. No surfaces were identified to be coated with lead-based paint ($\geq 0.7 \text{ mg/cm}^2$).

The client is advised that OSHA does not recognize a threshold level of lead for definition purposes, only the presence or absence of lead. Consequently, the OSHA regulations governing worker protection for lead-based paint may apply to work practices including the disturbance of paint systems with detectable levels of lead. Destructive actions (sanding, burning, demolition, component removal, paint preparation) to the lead-containing paint surfaces will require the contractor comply with the standards of OSHA,

including but not limited to initial exposure monitoring, the use of personal protective equipment, and medical surveillance.

APPENDIX I

SAMPLE LOCATION PLANS



FIRST FLOOR

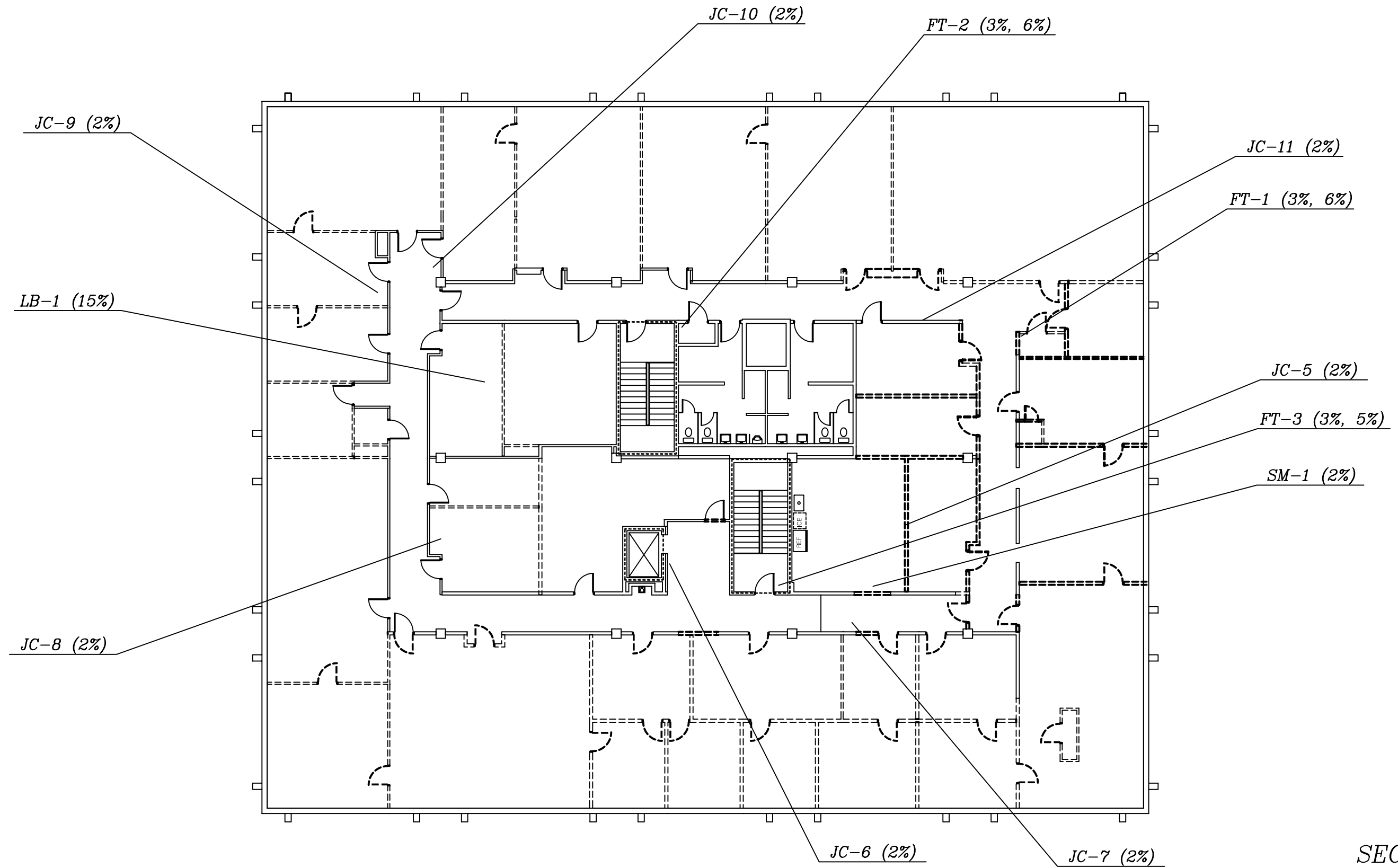
LEGEND
 G-2 (3%) Sample Designation,
 Approximate Sample Location &
 Percent Asbestos

SCALE:	Not To Scale
DRAWN BY:	ORA
APPROVED BY:	TB
DATE:	04/09/2010



SAMPLE LOCATION PLAN SC DEPT. OF AGRICULTURE 1101 WILLIAMS STREET COLUMBIA, SOUTH CAROLINA	
PROJECT NO:	1614-10-079

FIGURE NO:	1
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SECOND FLOOR

LEGEND

G-2 (3%) Sample Designation,
Approximate Sample Location &
Percent Asbestos

SCALE: Not To Scale
DRAWN BY: ORA
APPROVED BY: TB
DATE: 04/09/2010



SAMPLE LOCATION PLAN
SC DEPT. OF AGRICULTURE
1101 WILLIAMS STREET
COLUMBIA, SOUTH CAROLINA

PROJECT NO: 1614-10-079

FIGURE NO:

2

APPENDIX II

PHOTOGRAPHS



1 The subject building as seen looking northwest from the intersection of Williams and Senate Streets.



2 The white/grey sealant on the HVAC ducts in the northeast mechanical room tested positive for asbestos (25-35% chrysotile).



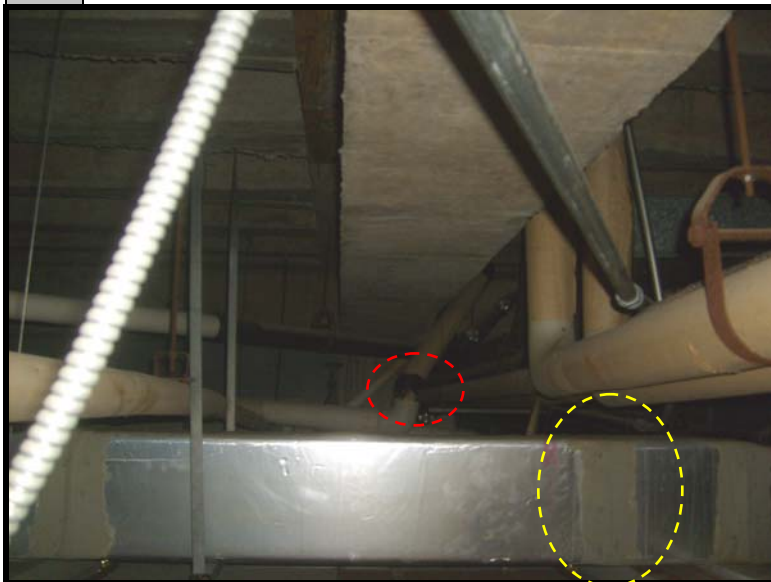
3 The two predominant types of 12" floor tile in the building. The lighter tiles are located on the 2nd floor, the beige ones are on the 1st floor. Both tiles and associated mastics contain asbestos.



4 Damaged ACM floor tiles in the Petroleum Lab on the first floor. The asbestos-containing black mastic is exposed.



5 Grey 12-inch floor tiles in the Petroleum Lab on the first floor. The tiles do not contain asbestos; however, the mastic is <1-4% chrysotile. Consequently, the tiles are considered ACM.



7 Grey duct sealant (yellow circle, 25-35% chrysotile) and black pipe insulation sealant (red circle, 5% chrysotile) located above the suspended ceiling in the Conference room on the first floor.



6 The purple soundproofing on the bottom of the metal sink in the break room on the second floor contains 2% chrysotile.



8 The black laboratory benches on the second floor tested positive for asbestos (15% chrysotile). This is the bench where sample "LB-1" was collected.



9 The cementitious panels beneath the windows on the first floor are assumed to contain asbestos.



10 The cementitious panels beneath the windows on the first floor are assumed to contain asbestos.

APPENDIX III

ASBESTOS BULK SAMPLE ANALYSIS SHEETS AND CHAIN OF CUSTODY RECORDS



9711 Southern Pine Boulevard
Charlotte, NC 28273
704-940-1830 Fax 704-565-4929
NVLAP ID 102075-0

POLARIZED LIGHT MICROSCOPY

Performed by EPA 600/R-93/116 Method

Asbestos Analysis Summary

Client Name Columbia Branch

134 Suber Rd.
Columbia SC 29210

Date Received 3/12/2010

Client Job SC AG Lab

Date Analyzed 3/18/2010

Job Number 1614-10-079

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
10-4901	VD-1	TAN FIBROUS		ND	70 GLASS	30 OTHER
10-4902	VD-2	TAN FIBROUS		ND	100 CELLULOSE	<1 OTHER
10-4903	DM-1	TAN FIBROUS		25 CHRYSOTILE	35 GLASS	40 OTHER
10-4904	DM-2	TAN FIBROUS		35 CHRYSOTILE	35 GLASS	30 OTHER

Kari Wasmer

Analyzed by: Kari Wasmer
Additional Comments:

Jane Wasilewski

Jane Wasilewski
Laboratory Manager

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Job Number 1614-10-079

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
10-4905	DM-3	WHITE FIBROUS		ND	20 GLASS 10 CELLULOSE	70 OTHER
10-4906	CT-1	WHITE FIBROUS		ND	25 CELLULOSE	75 GYPSUM
10-4907	CT-2	WHITE FIBROUS		ND	15 CELLULOSE	85 GYPSUM
10-4908	CT-3	WHITE FIBROUS		ND	20 CELLULOSE	80 GYPSUM
10-4909	CT-4	TAN FIBROUS		ND	40 CELLULOSE 40 GLASS	20 PERLITE
10-4910	CT-5	TAN FIBROUS		ND	40 CELLULOSE 40 GLASS	20 PERLITE

Kari Wasmer

Analyzed by: Kari Wasmer
Additional Comments:

Jane Wasilewski

Jane Wasilewski
Laboratory Manager

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Job Number 1614-10-079

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
10-4911	CT-6	TAN FIBROUS		ND	40 CELLULOSE 40 GLASS	20 PERLITE
10-4912A	FT-1	WHITE NONFIBROUS	TILE	3 CHRYSOTILE		97 OTHER
10-4912B	FT-1	BLACK NONFIBROUS	MASTIC	6 CHRYSOTILE		94 OTHER
10-4913A	FT-2	WHITE NONFIBROUS	TILE	3 CHRYSOTILE		97 OTHER
10-4913B	FT-2	BLACK NONFIBROUS	MASTIC	8 CHRYSOTILE		92 OTHER
10-4914A	FT-3	WHITE NONFIBROUS	TILE	3 CHRYSOTILE		97 OTHER

Kari Wasmer

Analyzed by: Kari Wasmer
Additional Comments:

Jane Wasilewski

Jane Wasilewski
Laboratory Manager

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Job Number 1614-10-079

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
10-4914B	FT-3	BLACK NONFIBROUS	MASTIC	5 CHRYSOTILE		95 OTHER
10-4915A	FT-4	GREY NONFIBROUS	TILE	ND		100 OTHER
10-4915B	FT-4	BLACK NONFIBROUS	MASTIC	4 CHRYSOTILE		96 OTHER
10-4916A	FT-5	GREY NONFIBROUS	TILE	ND		100 OTHER
10-4916B	FT-5	YEL/BLK NONFIBROUS	MASTIC	<1 CHRYSOTILE		100 OTHER
10-4917A	FT-6	GREY NONFIBROUS	TILE	ND		100 OTHER

Kari Wasmer

Analyzed by: Kari Wasmer
Additional Comments:

Jane Wasilewski

Jane Wasilewski
Laboratory Manager

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Job Number 1614-10-079

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
10-4917B	FT-6	BLK/YEL NONFIBROUS	MASTIC	2 CHRYSOTILE		98 OTHER
10-4918A	FT-7	CREAM NONFIBROUS	TILE	2 CHRYSOTILE		98 OTHER
10-4918B	FT-7	BLACK NONFIBROUS	MASTIC	6 CHRYSOTILE		94 OTHER
10-4919A	FT-8	CREAM NONFIBROUS	TILE	2 CHRYSOTILE		98 OTHER
10-4919B	FT-8	BLACK NONFIBROUS	MASTIC	6 CHRYSOTILE		94 OTHER
10-4920A	FT-9	CREAM NONFIBROUS	TILE	2 CHRYSOTILE		98 OTHER

Kari Wasmer

Analyzed by: Kari Wasmer
Additional Comments:

Jane Wasilewski

Jane Wasilewski
Laboratory Manager

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Job Number 1614-10-079

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
10-4920B	FT-9	BLACK NONFIBROUS	MASTIC	6 CHRYSOTILE		94 OTHER
10-4921A	ST-1	BLACK NONFIBROUS	STAIR TREAD	ND		100 OTHER
10-4921B	ST-1	YELLOW NONFIBROUS	MASTIC	ND		100 OTHER
10-4922A	ST-2	BLACK NONFIBROUS	STAIR TREAD	ND		100 OTHER
10-4922B	ST-2	YELLOW NONFIBROUS	MASTIC	ND		100 OTHER
10-4923A	ST-3	BLACK NONFIBROUS	STAIR TREAD	ND		100 OTHER

Kari Wasmer

Analyzed by: Kari Wasmer
Additional Comments:

Jane Wasilewski

Jane Wasilewski
Laboratory Manager

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Job Number 1614-10-079

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
10-4923B	ST-3	YELLOW NONFIBROUS	MASTIC	ND		100 OTHER
10-4924	SM-1	PURPLE NONFIBROUS		2 CHRYSOTILE		98 OTHER
10-4925A	BB-1	BLACK NONFIBROUS	BASEBOARD	ND		100 OTHER
10-4925B	BB-1	BROWN NONFIBROUS	MASTIC	ND		100 OTHER
10-4926A	BB-2	BLACK NONFIBROUS	BASEBOARD	ND		100 OTHER
10-4926B	BB-2	BROWN NONFIBROUS	MASTIC	ND		100 OTHER

Kari Wasmer

Analyzed by: Kari Wasmer
Additional Comments:

Jane Wasilewski

Jane Wasilewski
Laboratory Manager

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Job Number 1614-10-079

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
10-4927A	BB-3	BLACK NONFIBROUS	BASEBOARD	ND		100 OTHER
10-4927B	BB-3	BROWN NONFIBROUS	MASTIC	ND		100 OTHER
10-4928A	BB-4	BROWN NONFIBROUS	BASEBOARD	ND		100 OTHER
10-4928B	BB-4	BROWN NONFIBROUS	MASTIC	ND		100 OTHER
10-4929A	BB-5	BROWN NONFIBROUS	BASEBOARD	ND		100 OTHER
10-4929B	BB-5	BROWN NONFIBROUS	MASTIC	ND		100 OTHER

Kari Wasmer

Analyzed by: Kari Wasmer
Additional Comments:

Jane Wasilewski

Jane Wasilewski
Laboratory Manager

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Job Number 1614-10-079

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
10-4930A	BB-6	BROWN NONFIBROUS	BASEBOARD	ND		100 OTHER
10-4930B	BB-6	BROWN NONFIBROUS	MASTIC	ND		100 OTHER
10-4931	DW-1	WHITE FIBROUS		ND	20 CELLULOSE	80 GYPSUM
10-4932	DW-2	WHITE FIBROUS		ND	30 CELLULOSE	70 GYPSUM
10-4933	DW-3	WHITE FIBROUS		ND	30 CELLULOSE	70 GYPSUM
10-4934	DW-4	WHITE FIBROUS		ND	10 CELLULOSE <1 GLASS	90 GYPSUM

Kari Wasmer

Analyzed by: Kari Wasmer
Additional Comments:

Jane Wasilewski

Jane Wasilewski
Laboratory Manager

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Job Number 1614-10-079

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
10-4935	DW-5	WHITE FIBROUS		ND	5 CELLULOSE <1 GLASS	95 GYPSUM
10-4936A	DW-6	WHITE FIBROUS	SHEETROCK	ND	25 CELLULOSE	75 GYPSUM
10-4936B	DW-6	WHITE NONFIBROUS	JT COMPOUND	ND		100 OTHER
10-4937	DW-7	WHITE FIBROUS		ND	15 CELLULOSE	85 GYPSUM
10-4938	JC-1	WHITE NONFIBROUS		2 CHRYSOTILE		98 OTHER
10-4939	JC-2	WHITE NONFIBROUS		ND		100 OTHER

Kari Wasmer

Analyzed by: Kari Wasmer
Additional Comments:

Jane Wasilewski

Jane Wasilewski
Laboratory Manager

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Job Number 1614-10-079

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
10-4940	JC-3	WHITE NONFIBROUS		ND		100 OTHER
10-4941	JC-4	WHITE NONFIBROUS		ND		100 OTHER
10-4942	JC-5	YELLOW NONFIBROUS		2 CHRYSOTILE		98 OTHER
10-4943	JC-6	WHITE NONFIBROUS		2 CHRYSOTILE		98 OTHER
10-4944	JC-7	WHITE NONFIBROUS		2 CHRYSOTILE		98 OTHER
10-4945	JC-8	WHITE NONFIBROUS		2 CHRYSOTILE		98 OTHER

Kari Wasmer

Analyzed by: Kari Wasmer
Additional Comments:

Jane Wasilewski

Jane Wasilewski
Laboratory Manager

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Job Number 1614-10-079

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
10-4946	JC-9	WHITE NONFIBROUS		2 CHRYSOTILE		98 OTHER
10-4947	JC-10	WHITE NONFIBROUS		2 CHRYSOTILE		98 OTHER
10-4948	JC-11	WHITE NONFIBROUS		2 CHRYSOTILE		98 OTHER
10-4949	WM-1	BLACK FIBROUS		5 CHRYSOTILE	20 CELLULOSE 20 GLASS	55 OTHER
10-4950	WM-2	BLACK FIBROUS		5 CHRYSOTILE	20 CELLULOSE 20 GLASS	55 OTHER
10-4951	WM-3	BLACK FIBROUS		5 CHRYSOTILE	20 CELLULOSE 20 GLASS	55 OTHER

Karl Wasmer

Analyzed by: Karl Wasmer
Additional Comments:

Jane Wasilewski

Jane Wasilewski
Laboratory Manager

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Job Number 1614-10-079

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
10-4952	LB-1	BLACK FIBROUS		15 CHRYSOTILE		85 OTHER

Kari Wasmer

Analyzed by: Kari Wasmer
Additional Comments:

Jane Wasilewski

Jane Wasilewski
Laboratory Manager

For heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. ND = None Detected (Asbestos Not Present in Representative Sample). RCF= (Refractory Ceramic Fiber) The results pertain only to the sample identification above.
The sample may not be fully representative of the larger material in question. This sheet may not be reproduced except with permission from SME, Inc. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Although Polarized Light Microscopy (PLM/Dispersion Staining) (Method EPA 600/R-93/116) is the specified method for analysis of bulk material samples for asbestos under the EPA Asbestos Hazard Emergency Response Act, there have been reports that this method may not identify asbestos when fiber sizes are extremely small or if they are bound in a resinous material. Such materials include floor tile, mastic and asphaltic roofing. Currently, reanalysis by Transmission Electron Microscopy (TEM) to verify results of <1% or "None Detected" for these materials is recommended.

BULK SAMPLE

CHAIN OF CUSTODY RECORD



Requested Turn Around Time:		<input type="checkbox"/> Same Day
<input type="checkbox"/> 24-Hour	<input type="checkbox"/> 48-Hour	<input checked="" type="checkbox"/> 3-5 Day
		<input type="checkbox"/> 6-10 Day

PROJECT NO.	PROJECT NAME:	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:			
1614-10-079	SC AG LAB	<i>[Signature]</i>	3/11/10	1615	UPS			
FACILITY		RELINQUISHED BY:	DATE	TIME	RECEIVED BY:			
		RELINQUISHED BY:	DATE	TIME	RECEIVED BY:			
SAMPLER(S)	DATE TAKEN	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:			
DA AB	3/9 + 3/11/10							
SAMPLE #	LAB NUMBER	MATERIAL	LOCATION	QUANTITY	HA	FIN	COND.	COMMENTS / SPECIAL INSTRUCTIONS
VD-1	19-4901	Vibration Impactor	NE Mech room					
2	02	"	Central Mech room					
DM-1	03	Whisk/grey sealant on HVAC	hubs NE Mech room					
2	04	↓	"					
3	05	2nd flr by elev.						
CT-1	06	2" Gypsum ceiling tile	SE great room					
2	07	↓	Junior office					
3	08		Petro lab					
CT-4	09	2" Acoustic ceiling tile	2nd flr - in w/ vent hatch					
5	10	↓	1st - conf. room					
6	11	↓	Rm 124					
FT-1	12	12" VFT off white w/ green (2nd Floor)	2nd flr elec. closet					
2	13	↓	" Junior					
3	14		Stairwell by lobby					
FT-4	15	12" Gray VFT	Petro. lab (anywhere?)	-60 sq. ft.				
5	16	↓						
6	17	↓						
FT-7	18	12" VFT off white w/ small specks (1st Flr)	Junior's					
8	19	↓	Petro lab					
9	20		"					
ST-1	21	Black vinyl stair tread	West stairwell	3 sq. ft. x				
2	22	↓	East "	48 steps				
3	4923		" "					

BULK SAMPLE

CHAIN OF CUSTODY RECORD



Requested Turn Around Time:		<input type="checkbox"/> Same Day
<input type="checkbox"/> 24-Hour	<input type="checkbox"/> 48-Hour	<input checked="" type="checkbox"/> 3-5 Day
		<input type="checkbox"/> 6-10 Day

PROJECT NO. 1614-10-079		PROJECT NAME: SC Ag. Lab		RELINQUISHED BY:	DATE 3/11/10	TIME 1615	RECEIVED BY: UPS	
FACILITY				RELINQUISHED BY:	DATE	TIME	RECEIVED BY: K-W	
SAMPLER(S) OA + AB		DATE TAKEN 3/9 + 3/11/10		RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	
SAMPLE #	LAB NUMBER	MATERIAL	LOCATION	QUANTITY	HA	F/N	COND.	COMMENTS / SPECIAL INSTRUCTIONS
SA-1	4924	Purple sandpaper	Adel suit 2nd flr bedroom	1				
BB-1	25	4" Bll baseboard w/ baseboard	2nd flr elec. room					} 1 TEM. if any
2	26	↓	1st Junior					
3	27	↓	Petro lab					
BB-4	28	Hard blk bb (painted brn)	Earl's office					} 1 TEM. if any
5	29	↓	Phil's office					
6	30	↓						
DW-1	31	Drywall	2nd flr elec.					
2	32	↓	Phil's office					
3	33	↓	Rm w/ roof hatch					
DW-4	34	Drywall	1st flr - dropped ceiling in hall					
5	35	↓	Bedroom					
6	36	↓	Timber's office					
7	37	↓	Front office					
JC-1	38	Joint compound	1st flr Front office					
2	39	↓	Bedroom					
3	40	↓	Timber's					
4	41	↓	Dropped ceiling in hall					
JC-5	42	Joint compound	2nd flr. Bedroom					
6	43	↓	by elec.					
7	44	↓	o/s Rm 249					
8	45	↓	Rm 212					
9	46	↓	o/s Rm 212					
10	47	↓	o/s Rm 220					
11	4748	↓	Rm 229					

**EMSL Analytical, Inc.**

4335 Stuart Andrew Blvd, Suite 101, Charlotte, NC 28217

Phone: (704) 525-2205 Fax: (704) 525-2382 Email: charlottelab@emsl.com

Attn: **Jane Wasilewski/Kari Wasmer**
S&ME, Inc.
9711 Southern Pine Blvd.
Charlotte, NC 28273

Customer ID: SMEI54A
Customer PO: 51408
Received: 03/19/10 1:22 PM
EMSL Order: 411000536

Fax: (704) 525-3953 Phone: (704) 523-4726
Project: **1614-10-079**

EMSL Proj:
Analysis Date: 3/23/2010

Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM
via EPA/600/R-93/116 Section 2.5.5.1

SAMPLE ID	DESCRIPTION	APPEARANCE	% MATRIX MATERIAL	% NON-ASBESTOS FIBERS	ASBESTOS TYPES
Ft-6 411000536-0001	Tile Only	Gray Non-Fibrous Homogeneous	98.7	1.3 Non-fibrous (other)	No Asbestos Detected
ST-3 411000536-0002	Stair Tread	Black Non-Fibrous Homogeneous	55.0	45.0 Non-fibrous (other)	No Asbestos Detected
ST-3 411000536-0003	Mastic	Yellow Non-Fibrous Homogeneous	53.9	46.1 Non-fibrous (other)	No Asbestos Detected
BB-3 411000536-0004	Baseboard	Black Non-Fibrous Homogeneous	38.6	61.4 Non-fibrous (other)	No Asbestos Detected
BB-3 411000536-0005	Mastic	Brown Non-Fibrous Homogeneous	37.0	63.0 Non-fibrous (other)	No Asbestos Detected
BB-4 411000536-0006	Baseboard	Black Non-Fibrous Homogeneous	51.5	48.5 Non-fibrous (other)	No Asbestos Detected
BB-4 411000536-0007	Mastic	Brown Non-Fibrous Homogeneous	53.3	46.7 Non-fibrous (other)	No Asbestos Detected

Analyst(s)

Lee Plumley (6)
Scott Combs (1)

Lee Plumley, Laboratory Manager
or other approved signatory

This laboratory is not responsible for % asbestos in total sample when the residue only is submitted for analysis. The above report relates only to the items tested. This report may not be reproduced, except in full, without written approval by EMSL Analytical, Inc. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. 4335 Stuart Andrew Blvd, Suite 101, CharlotteNC

411000536



Chain of Custody

Asbestos Lab Services

EMSL Analytical, Inc.
Atrium Corporate
Center, Suite 101
4335 Stuart Andrew
Blvd.
Charlotte, NC 28217
Phone: (704) 525-2205
Fax: (704) 525-5398
<http://www.emsl.com>

Please print all information legibly.

Company:	S&ME, Inc.	Bill To:	S&ME, Inc.
Address1:	9731G Southern Pine Blvd.	Address1:	9731G Southern Pine Blvd.
Address2:		Address2:	
City, State:	Charlotte, NC	City, State:	Charlotte, NC
Zip/Post Code:	28273	Zip/Post Code:	28273
Country:		Country:	
Contact Name:	Jane Wasilewski/Kari Wasmer	Attn:	Jane Wasilewski or Kari Wasmer
Phone:	704-940-1830 x1169	Phone:	704-940-1830 x1169
Fax:	704-565-4929	Fax:	704-565-4929
Email:	jwasilewski@smeinc.com	Email:	jwasilewski@smeinc.com, kwasmer@smeinc.com
Project Name/Number:	kwasmer@smeinc.com P.O. Number: 51408		
	1614-10-079		

MATRIX			TURNAROUND			
<input type="checkbox"/> Air	<input type="checkbox"/> Soil	<input type="checkbox"/> Micro-Vac	<input type="checkbox"/> 3 Hours	<input type="checkbox"/> 6 Hours	<input type="checkbox"/> Same Day or 12 Hours*	<input type="checkbox"/> 24 Hours (1 day)
<input checked="" type="checkbox"/> Bulk	<input type="checkbox"/> Drinking Water		<input type="checkbox"/> 48 Hours (2 days)	<input checked="" type="checkbox"/> 72 Hours (3 days)	<input type="checkbox"/> 96 Hours (4 days)	<input type="checkbox"/> 120 Hours (5 days)
<input type="checkbox"/> Wipe	<input type="checkbox"/> Wastewater		<input type="checkbox"/> 144+ hours (6-10 days)			

TEM AIR, 3 hours, 6 hours, Please call ahead to schedule. There is a premium charge for 3-hour tat, please call 1-800-220-3675 for price prior to sending samples. You will be asked to sign an authorization form for this service.

*12 hours (must arrive by 11:00a.m. Mon -Fri.), Please Refer to Price Quote

PCM - Air <input type="checkbox"/> NIOSH 7400(A) Issue 2: August 1994 <input type="checkbox"/> OSHA w/TWA <input type="checkbox"/> Other:	TEM Air <input type="checkbox"/> AHERA 40 CFR, Part 763 Subpart E <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II	TEM WATER <input type="checkbox"/> EPA 100.1 <input type="checkbox"/> EPA 100.2 <input type="checkbox"/> NYS 198.2
PLM - Bulk <input type="checkbox"/> EPA 600/R-93/116 <input type="checkbox"/> EPA Point Count <input type="checkbox"/> NY Stratified Point Count <input type="checkbox"/> PLM NOB (Gravimetric) NYS 198.1 <input type="checkbox"/> NIOSH 9002: <input type="checkbox"/> EMSL Standard Addition:	TEM BULK <input type="checkbox"/> Drop Mount (Qualitative) <input type="checkbox"/> Chatfield SOP - 1988-02 <input checked="" type="checkbox"/> TEM NOB (Gravimetric) NYS 198.4 <input type="checkbox"/> EMSL Standard Addition:	TEM Microvac/Wipe <input type="checkbox"/> ASTM D 5755-95 (quantative method) <input type="checkbox"/> Wipe Qualitative
SEM Air or Bulk <input type="checkbox"/> Qualitative <input type="checkbox"/> Quantitative	PLM Soil <input type="checkbox"/> EPA Protocol Qualitative <input type="checkbox"/> EPA Protocol Quantitative <input type="checkbox"/> EMSL MSD 9000 Method fibers/gram	XRD <input type="checkbox"/> Asbestos <input type="checkbox"/> Silica NIOSH 7500 OTHER <input type="checkbox"/>

411 000 536



Chain of Custody

Asbestos Lab Services

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 Blvd.
 Charlotte, NC 28217
 Phone: (704) 525-2205
 Fax: (704) 525-5398
<http://www.emsl.com>

Please print all information legibly.

Client Sample # (s) FT-6 - BB-4

Total Samples #: 7

Relinquished: K. W. Date: 3/19/10

Time: 1100

Received: J. Gendron Date: 3/19/10

Time: 1100

Relinquished: J. Gendron Date: 3/19/10

Time: 1300

Received: [Signature] Date: 3/19/10

Time: 13:22

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)
* FT-6	Tile only	
ST-3	Stair Tread	
↓	Mastic	
BB-3	Baseboard	
↓	Mastic	
BB-4	Baseboard	
↓	Mastic	

* Please do not contaminate tile w/ positive mastic

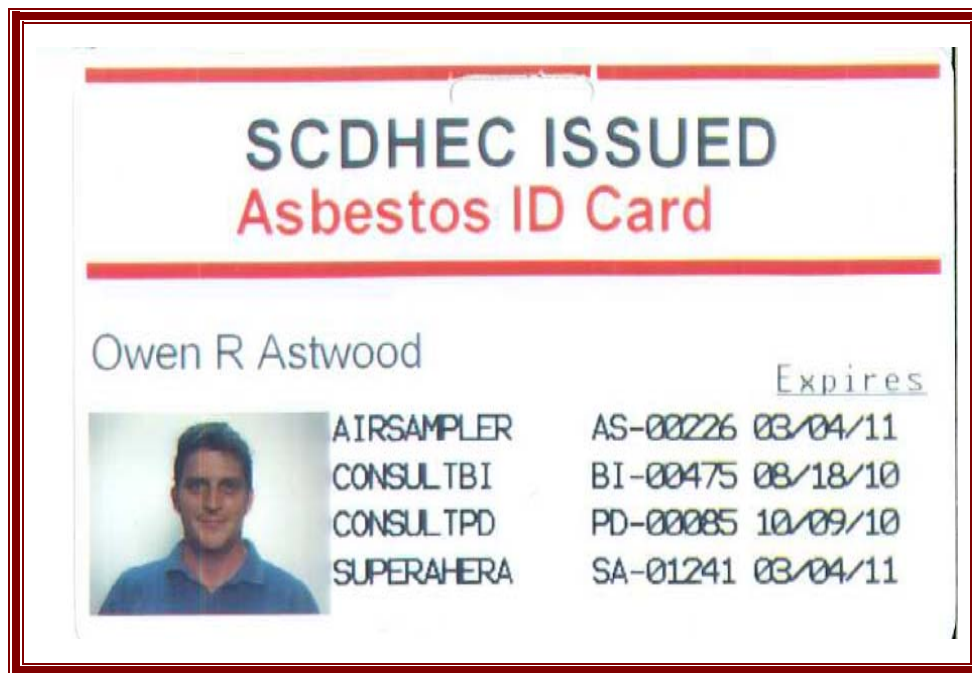
APPENDIX IV

COPY OF SCDHEC INSPECTOR LICENSE



South Carolina Department
of
Health and Environmental Control
Asbestos License

Owen R. Astwood



Air Sampler AS-00226
Building Inspector BI-00475
Project Designer PD-00085
Asbestos Supervisor SA-01241

APPENDIX V

XRF READING SUMMARY TABLE OF LEAD-BASED PAINT

Serial #XL309-U3826NR7255

PAINT

Project No.: 1614-10-079

Site:

Date:

Ranges (NEG<INC<POS): Device PCS



Reading Number	Floor	Room	Feature	Substrate	Condition	Color	Result	XRF Reading (mg/cm ²)
1		Shutter Calibrate					...	NA
2		Calibrate					POS	1.12
3		Calibrate					POS	1.09
4		Calibrate					POS	1.36
5	1	Exterior - small building	Wall	Brick	Fair	White	NEG	-0.13
6	1	Exterior	Bollard	Metal	Fair	Yellow	NEG	0
7	1	Exterior	Column	Concrte	Intact	White	NEG	0
8	1	Lobby	Wall	Cinder block	Intact	White	NEG	0
9	1	Hall	Door frame	Metal	Intact	Black	NEG	0
10	1	Office	Wall	Drywall	Intact	Beige	NEG	0
11	1	Conference Room	Wall	Cinder block	Intact	Beige	NEG	-0.74
12	1	Hall	Door	Metal	Intact	Black	NEG	0.03
13	1	Room 121	Fire blanket cabinet door	Metal	Intact	Red	NEG	0.01
14	1	Room 121/124	Cabinet door	Metal	Intact	Blue	NEG	0.01
15	1	Room 125	Wall	Cinder block	Intact	White	NEG	0
16	1	Room 125	Cylinder bracket	Wood	Intact	Yellow	NEG	0
17	1	Break room	Sprinkler stand pipe	Metal	Intact	Red	NEG	0.69
18	1	Break room	Sprinkler stand pipe	Metal	Intact	Orange	NEG	0
19	1	Break room	Wall	Drywall	Intact	White	NEG	0
20	1	Stairwell	Stair stringer	Metal	Intact	Black	NEG	0.11
21	1	Stairwell	Stair rail	Metal	Intact	Black	NEG	0.26
22	1	Stairwell	Stair riser	Concrte	Intact	Black	NEG	0.08
23	2	Hall	Elevator door frame	Metal	Intact	Black	NEG	0
24	2	Room 234	Floor	Concrte	Intact	Blue	NEG	0
25	2	Room 233	Floor	Concrte	Intact	Blue	NEG	0.01
26	2	Room 233	Column	Concrte	Intact	White	NEG	0.12
27	2	Room 248	Door frame	Metal	Intact	Black	NEG	0.06
28	2	Room 229	Floor	Concrte	Intact	Brown	NEG	-1.02
29	2	Room 228	Wall	Drywall	Intact	White	NEG	0.13
30	2	Room 225	Power strip	Metal	Intact	White	NEG	0.01
31	2	Room 224	Floor	Concrte	Intact	Blue	NEG	-0.4
32	2	Room 221	Wall	Drywall	Intact	White	NEG	0.16
33	2	Room 235	Door jamb	Concrete	Fair	Yellow	NEG	0.05
34	2	Earl's office	Wall	Cinder block	Intact	White	NEG	0
35	2	Room 236	Wall	Drywall	Intact	White	NEG	0.16
36	2	Phil's office	Door frame	Metal	Intact	Black	NEG	0.1
37	1	Lobby	Transite window panel	Concrte	Intact	Black	NEG	0.01
38		Calibrate					POS	1.17
39		Calibrate					POS	1.07
40		Calibrate					POS	1.04